ABSTRACT

Changes that occur in Natk ATPase regulation and therefore in the membrane potential in cells from bipolar individuals, as compared to cells from unaffected control individuals, are utilized provide a diagnostic assay for bipolar disorder. The diagnostic assay may also or instead exploit the similarity of cells from bipolar patients to those of people already known to have bipolar disorder. A similar diagnostic assay is provided for diagnosing unipolar disorder. The diagnostic assays may further involve manipulation of membrane potential incubation of cells K⁺-free buffer in and/or incubation with one or more compounds that alter Natk ATPase activity. Although a variety of cells may be used, the diagnostic assays preferably employ lymphoblasts or whole blood cells.